Some Ornithological Notes and Corrections.

By W. Edwin Brooks, C. E.

(Received August 25th, read Nov. 4th, 1874).

Tinnunculus Pekinensis, Swinhoe.

I obtained a mature male, a young male in changing plumage, and an adult female of this species, in April last, near Dinapore. They were, with many others, hovering over the cleared *paddy* land close to the line of railway.

T. cenchris, Naum., it will be remembered, is distinct from the Indian and Chinese species.

Accipiter virgatus, Temm.

J. A. S. B., 1872, p. 73.

Mr. Hume saw the specimen procured in Cashmere by Capt. Cock, and pronounced it to be an old male of *Ac. nisus*, Lin.; in which I believe him to have been correct.

Aquila bifasciata, Gray and A. orientalis, Cab.

With the addition of Mr. Anderson's specimens, I have now eight of the latter species. Four are marked as males, as indeed their small size indicates; the average length of the wing in these is 20·09 inches. Of four males of *A. bifasciata*—the first four I met with—the average of the wing is 20·62 inches, or a trifle more than half an inch difference, which is quite a trifling one for so large a bird as an eagle. The sexing of one of the four females is certainly incorrect: this bird has a wing only 20.75 long: one of the males has the wing 20.50: showing a difference of only 0.25 in. between male and female, which, in an eagle of this size, is far too small; there should have been a difference of 1.50 in. at least. Between the four males and four females of *A. bifasciata* there is an average difference of 2.63 inches; I, therefore, need only contrast the males of each as regards size, using for this purpose only this series of eight of each which I have before me.

One of the objections to my identification of *Aq. orientalis* with *A. bifasciata* was the alleged larger average size of the latter—a question which must be left open till a reliable series of the European bird can be obtained, *i. e.*, reliable as regards sex. The European birds were mostly obtained from the dealer Moeschler of Dresden, and there is much doubt about the specimens marked as females, for they approach the males too closely in size.

The other point of supposed difference was the darker tone of plumage of the European bird. With regard to this, I find that the Indian species is quite as dark. In fact, in the series now before me, the balance of darkness

of colour is decidedly on the side of the Indian birds. The European ones, which are spring and summer birds, are more faded. The question of colour may, therefore, be dismissed at once, for in this respect the two species correspond as closely as could be desired, but that of comparative size must stand over till a good series of the European bird is obtained, and for such a series to possess any value the sexes of the birds should have been determined by a naturalist, and not by a mere dealer.

For the present, then, I adhere to my conclusion that the two species are identical ; each one having the peculiar buff patch at the back of the head, the strongly banded wings when immature, and a tail barred in precisely the same way—all very strong points in favour of absolute identity.

Aquila hastata, Lesson.

This species is said by Mr. Dresser to differ from the species found in North Europe, in the plumage of the young bird. The adults are said to correspond.

I have two specimens in their first plumage, taken from the nest at Saharunpore, and the following is a description of them.

Irides dark brown ; bill black, but lead-gray towards base ; cere and gape bright yellow ; feet a dull yellow ; claws black. Above, dark hair-brown ; this dark brown is shaded into quite a brownish-grey on the lower half of the back and upper tail-coverts, the feathers of this lighter portion being dark-shafted ; upper tail-coverts barred with white on their outer webs ; from top of head and down to nape of neck the feathers are tipped with small fulvous spots ; scapulars, ridge and bend of wing, and most of the lesser wing-coverts tipped with fulvous spots of larger size ; median wing-coverts similarly pale-tipped, with the lower row having the spots considerably larger (about $\frac{1}{2}$ in. in length) : this row of large spots presents the appearance, at a little distance, of a first and slight wing-bar ; greater coverts all broadly tipped with dull fulvous white, presenting the appearance of a second and strong bar on the wing ; secondaries and tertials broadly edged with greyish-white shaded off into the darker portion of the feather, and these light ends form the third bar on the wing ; the dark portion of the wing-coverts and scapulars is of the same dark hair-brown as the back ; primaries uniform black and unbarred ; secondaries brown, profusely barred with hoary-grey on both webs ; the greyish-white ends to the tertials are very broad ; cheeks and side of head brown of a paler shade than the top of the head and streaked very faintly with darker ; tail-feathers dark brown, tipped broadly with greyish-white, and barred with greyish on both webs ; these bars are nearly square to the shaft (Mr. Anderson's young example has not, however, any indication of bars on the tail, except on the two outer feathers, and these nearly obsolete bars are con-

fined to the inner webs) ; chin, throat, and breast are brown of a shade lighter than the head and upper back and gradually becoming paler lower down, till it passes into dingy fulvous on the lower abdomen and under tail-coverts ; from the top of the breast to lower abdomen the feathers have central and terminal stripes of fulvous, the stripes increasing in size towards the legs ; the feathers of the lower tail-coverts are slightly, but broadly, barred with pale brown, and the shaft portion forms also a longitudinal brown streak ; the appearance of the tail from below is brown, darkest towards the basal portion, and barred profusely with whitish grey ; tibial plumes lightish brown spotted with fulvous ; tarsus fulvous, indistinctly streaked with pale brown. The primaries, though apparently barless, are, especially the inner ones, when seen from below, obsoletely barred on the inner web. One specimen is much less spotted than the other on the upper portion of the wing, most of the lesser coverts being plain brown, and the small spots being almost confined to the vicinity of the bend of the wing and to its ridge.

Mr. Dresser has promised me an immature bird of the European form for comparison, the result of which will be communicated hereafter.

Aquila fulvescens, Gray and Hardw.

For the last three years no additional examples of this rare eagle have been procured. The African species, *Aquila nævioides*, Cuv. with which our bird has been confounded, is, I find, subject to some variation as regards the tail. In my remarks on this species (P. A. S. B., 1873, pp. 173-175), I noted the strongly barred tail of the example then before me. Mr. Anderson has since lent me another South African example, a fine adult bird, which is in the moult ; in it both *old* and *new* tail-feathers are hoary-greyish-brown, and the indications of bars so faint as to be only perceptible in certain lights. It would thus appear that only some individuals have the tail well-barred like the common Indian *Aquila Vindhiana*, and, consequently, that a barred tail may not always be one of the characteristics of the species. I may note that I have a single example of *Aquila Vindhiana* with an absolutely plain tail ; but of the hundreds that I have seen, all, with this single exception, had well-barred tails.

The body plumage of this second example of *Aq. nævioides* above referred to is of two colours : all the old feathers are light sandy-coloured, while the new ones are foxy-red : the lesser and median wing-coverts, and also the scapulars, are a mixture of purplish-brown of different shades and rufous ; the rufous, in most of the feathers, occupying the centre as a broad stripe, but in some cases being confined to one side. The nostril is vertical and of the same oblong form as that of *Aq. Vindhiana*.

I cannot understand how our Indian *A. Vindhiana* came to be con-

founded with the well-marked African *A. nævioides;* no two birds could be more distinct, the foxy-red plumage of the latter being most striking. As far as general tone of colour goes, the African species more resembles *Aquila fulvescens*, Gray in its immature or buff stage; but this last is readily distinguished by its very circular nostril, not to mention other well-marked differences.

Aquila Vindhiana, Franklin.

Having seen Ruppell's plate of *Aquila albicans* and read what Mr. Blanford* and Dr. Finsch† say of the North East African species, which they term *A. rapax*, Temm., I strongly suspect its identity with our Indian *A. Vindhiana*. From what I have seen of true *Aquila nævioides* vel *rapax*, I cannot conceive of this bird ever being "pale cream coloured" or "blackish brown;" and a species distinct from *A. nævioides* (and which has been confounded with it) is doubtless found in the Northern portion of Africa. Rüppell's plate of *A. albicans* is the most perfect representation of a pale "Wokhab" that could be desired. A series of North African and Punjab birds should be compared. Mr. J. H. Gurney once told me (*in litt.*) that the identity of the North African Eagle generally termed *A. nævioides* with our Indian *A. Vindhiana* was very probable; and also that Lord Walden had Abyssinian examples of the latter species.

Archibuteo strophiatus and A. cryptogenys Hodgs.

Are two entirely distinct species. I have copies of Hodgson's minute drawings of each, with all details of bills and feet. Although both are of similar size, the latter is a much feebler bird and more of a Buzzard; it has a very much smaller foot, a more slender tarsus, and a much smaller bill, and while *A. strophiatus* has the nostril free, *A. cryptogenys* has it partially hidden by plumes. The plumage of the two birds is also entirely different. Neither, I should remark, bears the faintest resemblance to *Aquila pennata*, which is only two-thirds of the size of Hodgson's two species, so that if a specimen of the last-named in the British Museum, said to have been sent by Hodgson, is labelled *A. strophiatus*, it could not have been so labelled by Hodgson, who cannot be held responsible for what is probably due to Museum blunders, and who anyhow knew the Booted Eagle too well to apply the name of *strophiatus* to it.

Milvus palustris, And.

P. A. S. 1873, pp. 142—147.

Mr. Anderson authorizes me to withdraw this species. I have procured a considerable series of the common Indian village Kite (*M. affinis*, Gould),

* Zoology and Geology of Abyssinia, p. 295.

† Trans. Zool. Soc. Lond., 1870, p. 201.

and there appears to be but little doubt that *M. palustris* is this bird in either second or third plumage.

As before observed, *M. Govinda*, Sykes is the larger Kite which comes to the plains of India in the cold weather. The large dimensions given by Sykes render it certain that he described the larger species, for no common village Kite reaches the length of 26 inches. It is also pretty clear that Sykes did not contemplate there being two affined Kites, both of them found in the country in which he worked.

Mr. Gurney has informed me that the two types are of different sizes; but regardless of the types, neither of which in this instance may have been the very one from which Sykes described, I think we should hold to the original description, which describes a large 26-inch Kite. And in this case *Milvus major*, Hume and *Milvus melanotis*, Temm. and Schleg. become synonyms of *Milvus Govinda*, Sykes.

I possess a common Indian village Kite, returned to me by Mr. Gurney as being feather for feather identical with the Australian species, *M. affinis*, Gould. This identical bird is the commonest form of the resident species distributed so widely over India; and I think, therefore, that our common Kite should in future be known by its correct name of *M. affinis*.

At Mussoorie, both species are to be seen during the spring and summer, but more in the interior of the hills only the large species, *M. Govinda*, is met with. A few breed at Barahaut on the Bhaugaruttee.

Pernis cristata, Cuv.

A young bird from the nest which I once kept in confinement, had the breast of a rather light earth-brown, each feather having a black central stripe. Even in this young bird the crest was well developed.

The dark-plumaged birds are the fully adult ones. I have one shot from the nest in this plumage, and all I saw at Saharunpore in July, where they had their nests in trees near the canal, were of this dark plumage. In speaking of the young bird, I should have mentioned that the upper plumage was a very dark clove-brown.

Hirundo Daurica, Lin. and H. erythropygia, Sykes.

I only met with the latter species in cishimalayan Cashmere, as far up as Chungus on the Tawi river. At Mussoorie, Simla, and Almorah, and also at Binsur, north of Almorah, the strongly striated species with paler rump-band (*H. Daurica*) prevails. It is also somewhat larger than *H. erythropygia*. I have procured both in the plains in the cold weather, but the hill bird is there very much scarcer. *H. erythropygia* breeds near Chunar, and at most places in the North-West Provinces where there are old buildings or quarries suitable. The eggs are laid at the commencement of the rains. At Mussoorie, I saw a nest of *H. Daurica* on the ceiling of

a bath-room in Col. Macdougall's house. The birds went in and out through a broken pane of glass. Other nests were affixed to the underside of the roofs of servants' houses belonging to a house at the south end of Mussoorie. The doors being generally left open, the place just suited the swallows, which were only shut up with their nests at night. The young were hatched in the beginning of July, so that the eggs must have been laid towards the latter part of June. I have, however, seen eggs of this species at Almorah in the end of April.

Hemichelidon Sibirica, Gmel.

H. fuliginosa, Hodg.

I have referred to this species in J. A. S. B., 1872, p. 75. It is now known by its older term of *H. Sibirica*, Gmel. I compared my examples with one of Hodgson's in the Indian Museum, and found them identical. Hodgson's dimension ($2\frac{3}{4}$ in.) for the wing refers to the minimum size; the range of variation in length of wing is greater than I supposed possible in such a small bird, viz. 2.75 to 3.05 in. What the small species referred to by me in J. A. S. B., 1872, p. 76 was, I have no means of ascertaining. I remember it well, and still have Mr. Hume's letter concerning it, written at the time, when he assured me that Hodgson's species was not the one commonly received as such.

Alseonax terricolor, Hodgs. and A. latirostris, Raffles.

Mr. Hume considers these species identical, and in writing of the former always terms it *A. latirostris*, under which name he has figured it in 'Lahore to Yarkand.' Mr. Swinhoe* identifies *Muscicapa cinereoalba*, Temm. and Schleg. with *Alseonax latirostris*, Raffles. Having examined the Chinese species *M. cinereoalba*, I find it distinct from *A. terricolor*, by its shorter tail and rather differently shaped and somewhat broader and shorter bill, which is also blacker towards the tip than in the other bird. *Alseonax latirostris* is without doubt one of these two closely allied birds; and the question is, Which of the two agrees with Raffles's type and description? Mr. Hume appears to think that because *A. terricolor*, Hodgs. has been procured in the country from which Raffles described his *A. latirostris*, it is therefore Raffles's species; but the other bird, which is a common species in China, may also occur in Sumatra in winter.

I do not know whether Mr. Swinhoe was correct in uniting *A. cinereoalba* and *A. latirostris*, and whether he compared his examples of the former with the type or not; and the subject requires thorough investigation, for Mr. Swinhoe† speaks of the Chinese bird as being "identical with the Indian species."

* Proc. Zool. Soc. Lond., 1871, p. 325. † P. Z. S., 1863, p. 288.

I know for a certainty, from close comparison, that Mr. Swinhoe's examples of *M. cinereoalba* in the Indian Museum are not identical with the Indian species *A. terricolor*, and I have indicated the points of difference. This identification of his makes me very much doubt that of *A. cinereoalba* with *A. latirostris*. Apparently he has not noted the difference between *A. terricolor* and *A. cinereoalba*.

I fail to see any grounds whatever for Mr. Hume's identification in the fact that both he and Lord Walden have *A. terricolor* from the locality whence Raffles obtained his species; and the question, What bird is *Alseonax latirostris?* must be regarded as at present an unsettled one.

Erythrosterna parva.

J. A. S. B., 1872, p. 76.

The bird I observed in Cashmere should be *Erythrosterna hypery-thra*, Cabanis, distinguished from *E. parva* by having a band of velvet-black down each side of the neck and edging the red of the throat and breast. This full breeding-plumage is assumed after the birds have left the plains. In the cold weather when they re-appear, they have lost the black band; but the old males retain the red breast. In this plumage it has been mistaken for *E. parva*, which for the present should be expunged from the Indian list.

Erythrosterna albicilla, Pallas.

Erroneously termed *E. leucura* by Blyth and Jerdon, this species having a western limit at about Buxar or Ghazeepore and being replaced in the North-West by the aforenamed species. The black wings and tail of *E. albicilla* and its colder and greyer plumage readily distinguish it from the other when in immature or female plumage; it is not nearly so often procured with a red throat, and even then the red does not extend down the breast as in the other species, but is confined to the throat.

Acrocephalus stentoreus, H. and E.

Acrocephalus brunnescens, Jerdon, Ibis, 1874, p. 49.

Lord Walden* considers the Cashmere species to be distinct. I have seen many both in Cashmere and in the plains of India, and the birds are perfectly identical. The very peculiar and loud voice is alone sufficient to identify the bird by, whether in the plains or in Cashmere. It varies somewhat in size and in tone of colour; the latter depending upon the season of the year. Our plains' birds are only with us during the cold weather, leaving in the spring. Cashmere is the nearest breeding-place, but the great majority of the birds probably go farther north. I should also remark that in this species length of bill, wing, and tail is variable.

* Trans. Zool. Soc. Lond., 1872, p. 64.

Acrocephalus dumetorum, Blyth.

I saw a few of this species near Mussoorie on June 1st frequenting dense rose-thickets at about 7000 feet elevation. Whether they would have remained there to breed or gone further north, is a question to be solved. Capt. Hutton is said to have taken the eggs near Mussoorie. The males were not singing, as they usually do vigorously when the nest is built.

Dumeticola affinis, Hodgs.

Is subject to variation as regards being spotted or not, just as is *D. major*, Brooks. I obtained one or two unspotted examples of the latter; they were breeding males, too, and in full song. Mr. Hodgson was aware of the variation, and hence figures *D. affinis* as unspotted, but describes it as spotted. The female of neither species has been recorded; that sex in both is probably unspotted. I never obtained a female of *D. major*.

Dumeticola brunneipectus, Blyth.

Referred to by Mr. Blanford in J. A. S. B., 1872, p. 164. I examined this bird, and found it to be *D. affinis* in the unspotted stage. I would suppress Blyth's *D. brunneipectus* altogether as a species, considering it but *D. affinis*, Hodgs.

Tribura luteoventris, Hodgs.

I examined the specimen referred to by Mr. Blanford* and found it also to be *Dumeticola affinis*, Hodgs. in the unspotted plumage. *Tribura luteoventris* has a longer head, measured from the back of the skull to the tip of the bill, which latter is also of a different shape. The specimen in the Indian Museum is so old and faded that the original colour cannot be recognized; nor can the forms of wing and tail be ascertained.

Neornis flavolivacea, Hodgs.

I have this species, and it is a greenish olive above. Hodgson's drawing, No. 900, does not represent it, as stated by Mr. Hume,† but is applicable to *Horornis assimilis*, Hodgs., as stated by Gray.

Phylloscopus pallidipes, Blanford, J. A. S. B., 1872, p. 162.

Is not a *Phylloscopus*, but a true *Horeites*. I have examined the type: the second quill is equal to about the sixteenth; third equal to eighth; the first, second, third, and fourth are graduated, the distance from tip to tip of each feather diminishing till the fourth is reached. This is a very rounded wing, such as is not possessed by any *Phylloscopus;* in the wing of which genus there is always a long space

* Journ. As. Soc. Bengal, 1872, p. 164. † Stray Feathers, 1873, p. 444.

between first and second quills, and the second is equal to from fifth or sixth to eighth or ninth, according to the species. The tail, too, of *Horeites pallidipes* is much rounded and *non-phylloscopine*. A further difference between *Phylloscopus* and *Horeites* lies in the fact that the former has twelve tail-feathers and the latter ten. I cannot see any generic distinction between *Horornis* and *Horeites*; *Neornis* also appears to be the same with a better developed tail.

PHYLLOSCOPUS MAGNIROSTRIS, Blyth.

Mr. Hume* tells us that this bird is identical with *P. borealis*, Blasius (*P. sylvicultrix*, Swinhoe). I examined the Chinese examples of the latter, in the Indian Museum, and found the following differences:

1. *P. borealis* has a minute first primary, as in *P. sibilatrix*, Bechst, while *P. magnirostris* has a much larger one, as in *Hippolais Rama*, Sykes.

2. The wing of *P. borealis* is of a different shape from that of *magnirostris*, being more pointed, with the 2nd quill intermediate between the 5th and 6th; while *P. magnirostris* has a wing much more rounded in form, the 2nd quill being equal to about the 9th.

Such differences as these are fatal to identity.

CULICIPETA CANTATOR, Tickell.

I examined the specimen referred to by Mr. Blanford† and found it to be *Reguloides viridipennis*, Blyth, and to agree perfectly with the types in the Indian Museum. *C. cantator* is a very different bird, and is correctly described by Jerdon.

REGULOIDES VIRIDIPENNIS, Blyth.

May be described as a small and brightly coloured *Reg. trochiloides*, Sundevall. Small examples of *Reg. trochiloides* are very difficult to separate from *Reg. viridipennis*.

REGULOIDES MACULIPENNIS, Blyth.

Mr. Hume‡ identifies this species with *Reg. chloronotus*, Hodgs.; against which I do protest. I also have seen Hodgson's drawing referred to by Mr. Hume and could not come to such a conclusion. Hodgson's types of *chloronotus* have been identified by Blyth and others with *Reg. proregulus*, Pallas. The drawing referred to is one intended to represent the nest, which by the bye is that of an *Æthopyga*, and we have no evidence that Hodgson distinguished between his *Abrornis chloronotus* and *Reg. maculipennis*, or that he knew the latter species at all. Such an identification from this slightly coloured drawing cannot be admitted. Hodgson sometimes over-

* Stray Feathers, 1873, p. 494.

† Journ. As. Soc. Bengal, 1872, p. 163.

‡ Stray Feathers, 1873, p. 494.

coloured and sometimes under-coloured. Take his *Lophophanes dichrous:* the drawing is far too red, and it would be impossible to recognize the species intended from it. So also with his *Parus Œmodius :* it was this very faulty drawing, omitting the crest and the wing spots, that led me to describe *Lophophanes Humei* (J. A. S. B., 1873, p 57), which must henceforward stand as *Lophophanes Œmodius*, for Blyth made out that the type of *Parus Œmodius* was not a *Parus* but a *Lophophanes*. Many of Hodgson's drawings are very good, especially those in which he had evidently superintended the work and given minute details, but others, such as that of the supposed *Reg. maculipennis*, are insufficient for the determination of such birds as the *Phylloscopi*, which, as a rule, resemble each other so much in size and colour.

I also examined the specimen referred to by Mr. Blanford in J. A. S. B., 1872, p. 162, and found it to be *Reguloides maculipennis*, Blyth; as also was *Reguloides* sp. ? mentioned on the following page of the same Journal.

BUDYTES FLAVA, Lin.

B. CINEREOCAPILLA, Savi.

B. MELANOCEPHALA, Bonaparte.

Under the term *Budytes viridis*, Scop. Lord Walden* makes great confusion. He says, "One example in winter plumage, olive green above, upper part of breast sulphur yellow, rest of under surface pure white; some of the ventral and under tail coverts dashed with sulphur yellow. Supercilium conspicuous, broad, and pure white. Agrees perfectly with examples from Continental India."

This bird is, of course, *Budytes flava*, the characteristic of which is the *broad* white supercilium. Again he says,† "*Motacilla flavescens*, Stephens, Gen. Zool. Aves. X, p. 559, is enumerated in the 'Hand list' by Mr. G. R. Gray, as a distinct species, with the habitats of the Moluccas, Celebes, Timor and Java, assigned. Stephens gave this title to Buffon's Bergeronette de l'ile de Timor Hist. Nat. V. p. 275. Buffon's bird belongs to that phase of plumage of *B. viridis*, (Gm.) in which the superciliary stripe is yellow, the upper plumage ash coloured, and the under yellow." When the male of *B. flava* has newly moulted in the spring, the supercilium is sometimes strongly tinged with bright yellow, as are the margins to the white wing-coverts and tertials; this yellow rapidly fades away leaving the feather pure white: the yellow tinge on the white wing margins is a regular occurrence, but that on the supercilium is accidental or, I should

* Trans. Zool. Soc., 1872, p. 65.

† In a memoir 'On the Birds of Celebes,' Trans. Zool. Soc. Lond., Vol. VIII, part 2, 1872, p. 65.

rather say, occasional and not specific. Of the many hundreds of examples examined by me, only three had this yellow bloom on the supercilium. Lord Walden, however, speaks of the bird as being *ash-coloured* above! The ash-coloured back in the field-wagtails pertains only to the young and, perhaps, to the female in winter plumage. When the supercilium is *yellow*, the back is *green* in *B. flava*. Stephens' bird was probably the female of *Budytes citreola*, Pallas or the male in autumnal plumage, for this species has a yellow supercilium and an ash-coloured back; which *B. flava*, *B. cinereocapilla*, and *B. melanocephala* certainly have not.

There are four distinct yellow field *Budytes* with olive green backs, and I note them, with short distinguishing characters of the mature male.

B. flava.	Grey head, broad white supercilium, grey and white cheeks.	Generallly distributed over the old world and northern half of the new.
B. cinereocapilla.	Dark grey head, supercilium absent or else very narrow and white; often only a half supercilium behind the eye; cheeks a dark slate colour or almost black. This dark cheek is the well marked peculiarity of the species.	Eastern Europe, India, and China.
B. melanocephala.	Pure black head, with very rarely indeed a supercilium, and then very narrow, like a thin white thread. I have twice seen examples with this thread-like supercilium. The black head is a good distinction.	Eastern Europe, India, and China.
B. Rayi.	Top of head yellowish olive, supercilium bright yellow, and cheeks yellow.	Western Europe, North-West Africa, and Central Asia.*

It will thus be seen that the colour of the cheek in summer is alone a sufficient criterion.

It seems inexplicable to me how so many good ornithologists have confounded these four very distinct species, and lumped them together as *B. flava* with varieties, or as *B. viridis* with varieties.

There are but two yellow-headed marsh wagtails found in all India, and, I believe, in all the world besides, viz. *Budytes calcaratus*, Hodgs.—with black back and yellow head, sometimes a greyish patch remaining on the lower back; and *Budytes citreola*, Pallas—with grey back and yellow head, also generally a crescentic black band above the shoulders at the hind part

* Two examples of this species, as also of *Anthus pratensis*, were lately obtained by Dr. Stoliczka in Yarkand.

of the lower neck, but this is sometimes absent, even when the bird is in full plumage. *B. citreoloides*, Hodgs. is identical with this latter species, and not with the former, as Mr. Hume supposes in 'Lahore to Yarkand.' Hodgson's drawing represents a yellow-headed wagtail with a grey back. The back feathers are always more or less changed when the head in spring becomes pure yellow; Hodgson's drawing thus shewing a uniform grey back with the yellow head, is clearly a representation of a male *B. citreola*. When the other species, *B. calcaratus*, Hodgs., attains the yellow head, the back is either blotched largely with jet-black or is entirely black. It is therefore an utter impossibility for Hodgson's *B. citreoloides* to have been the black backed bird.* *B. citreoloides*, Hodgs. is a synonym of *B. citreola*, Pallas, and as such should sink into disuse. Hodgson's drawing of *B. calcaratus* is lifesized, and represents the bird in winter plumage with yellow supercilium, olive cap, and grey back. In this plumage it closely resembles *B. citreola* in its winter plumage. It is *by the long tarsus alone* that I connect *B. calcaratus* with the black-backed bird. The tarsus of *B. citreola* never reaches the size given by Hodgson for *B. calcaratus;* both in the drawing and in the table of dimensions, the length of the tarsus given is that of the largest black-backed birds I have procured. In 'Lahore to Yarkand' Mr. Hume appears to consider Hodgson's description as inapplicable to the black-backed species; but I cannot see in what respect it does not suit. It should be remembered that Hodgson measured the tarsus from the sole of the foot, and not from the junction of the toes, the latter being the usual mode of measurement.

The females of all the six species I have noted, have their characteristics, but it would add too much to the length of this paper to introduce them now; enough to say that they abundantly confirm my view of the distinctness of each.

These wagtails can only be properly worked out by the field observer, and the confusion into which cabinet naturalists have thrown them is thus easily accounted for.

Motacilla Cashmiriensis, Brooks.

Is only *M. Hodgsoni*, Gray in full summer plumage. Having had abundant opportunities of again observing this bird up the valley of the Bhagaruttee, I am forced to the above conclusion.

I formerly thought that *M. Hodgsoni*, Gray and *M. personata*, Gould were identical, the former being the latter in breeding plumage: but having lately had the advantage of Mr. Mandelli's fine series of *M. Hodg-*

* Gould in his 'Birds of Asia' has misapplied the term to the black backed yellow headed Wagtail.

soni, shewing that the adult male retains its black back during the autumn and winter months, it is impossible to avoid the conclusion that the two species, though closely affined, are thoroughly distinct.

M. Hodgsoni may be described as a black-backed *M. personata*. Each species has the eye set in a diamond-shaped white patch, which even in young grey and white birds of the year is conspicuous; so that neither should ever be confounded with *M. luzoniensis* or *M. Dukhunensis*.

Old females of *Hodgsoni* have black backs like the males; but younger birds, as I take them to be, often have the back grey, but of a more dusky shade than that of *personata*, which has the back of a pure light grey. Some females of *Hodgsoni* have the grey clouded with black to a slight extent, especially on the upper portion of the back.

A parallel case of specific distinctness existing only in the colour of the back is that of *Budytes calcaratus*, Hodgson and *Budytes citreola*, Pallas; the former of which has a jet black back in the breeding season, while the latter has invariably a grey back, with generally a black half collar at the lower part of the hind neck during the breeding season. I refer to the males only, for the females are very similar to one another.

Motacilla Luzoniensis, Scop.

The western limit of this species appears to lie between Dinapore and Buxar, in the districts in which I have been placed. The old males, to a great extent, retain the black back during autumn and winter, and even the old females are somewhat patched and clouded with black at these seasons. The chin and throat is always white, and *the white band down the side of the neck*, as in *M. Dukhunensis*, is invariably present at all seasons. This white band communicates with the white surrounding the eye. In *M. personata*, the eye, at all seasons, is set in a diamond-shaped patch of white, which is bounded below, as well as above, by black; this white eye-patch has thus no communication with the white of the lower parts, and is the characteristic by which this species may at any time be easily known, when obtained in the plains.

Mr. Hume has pointed out to me that Dr. Jerdon's description of *M. Dukhunensis* is only applicable to *M. personata*, Gould, and this, as is proved by his appendix, was Dr. Jerdon's own conclusion; but in his description, the statement that "the neck all round is black" does not agree with another that in its winter dress it is barely distinguishable from *M. Luzoniensis*. *M. personata* is at all times conspicuously distinct from *M. Luzoniensis*. Dr. Jerdon's description of *M. Dukhunensis* is, however, not sufficiently definite to fix the species intended, neither is the original description by Sykes, except for the statement that "it very closely resem-

bles *M. alba* of Europe, but differs in being of a light slate or cinereus, and in the wing coverts and secondaries being edged with broader white" (P. Z. S., 1832, p. 91).

Anthus agilis, Sykes.

Was said by Blyth to be apparently *Anthus trivialis*, Penn. (= *Anthus arboreus*, Bechst). In the original description, Sykes says, "found on open stony lands;" but I think it probable, as it is the only *Anthus* noted by him, that his *agilis* was either *Agrodroma campestris*, Lin. or *Corydalla rufula*, Vieill. These pipits do affect stony and waste lands, as does *Corydalla striolata*, Blyth, but neither of the tree-pipits do, least of all *P. maculatus*, Hodg.,* to which Sykes's term *agilis* has most unaccountably been applied: the most arboreal of all pipits certainly is never found on "open stony lands." I think it would be almost safe to conclude that Sykes's bird was one of the three I have named, viz. either *Ag. campestris* juv. with spotted breast or *C. rufula* or *C. striolata*. I am most inclined to the last. I am weary of hearing ornithologists speak of the green Chinese tree-pipit as *P. agilis*, Sykes, the application of the name to it being absurd.

Alauda Deva, Sykes.

Spizalauda Deva Blyth.

I do not see any grounds whatever for separating the genus *Spizalauda* from *Alauda*, and I think the term should be abandoned. *Spizalauda simillima*, Hume is as true an *Alauda* in every respect, in colour of plumage, in voice, and in habits, as could be desired. It is rather small and this is all that can be said.

Sykes says of his *Alauda Deva*, that it is smaller than *A. Gulgula*, but *Alauda Malabarica*, which Mr. Hume would identify with *Alauda Deva*, is not smaller than *A. Gulgula*, but fully the same size, or if anything a larger and finer lark; Sykes's species is therefore the small one which Mr. Hume separated (J. A. S. B., 1870, p. 120) as *S. simillima;* and the last term becomes a synonym of *Alauda Deva*, Sykes. I have seen many of this last, including some brought by bird-catchers from localities well to the south and west, and there is but one species which is smaller than *gulgula*, and this is the true *Alauda Deva* of Sykes. The Khandalla large crested lark, *A. Malabarica* Scop., will stand as such till the contrary be shewn, and my *Alauda australis* of the Neilgherries (Stray Feathers, 1873, p. 486), which is a fine large non-crested rufous toned *Alauda*, will stand until an older name can be shewn as clearly pertaining to it.

* In J. A. S. B., 1873, p. 83, line 24, for "*never* strictly arboreal, read "*more* strictly arboreal."

Alauda dulcivox, Hodg.

Of the unfair identification of this species with *A. arvensis* of Europe, I shall say nothing more, but will leave those that have good eyes for form and colour to decide for themselves, when they have an opportunity of comparing specimens of each: I repeat that they are most thoroughly distinct, and that *A. arvensis* is *non-alpine* or *non-monticolous*. The colour and form of bill is different, the colour of the legs and feet is different, to say nothing of the different body plumage and almost total absence of rufous on the greater wing-coverts. There is the utmost difference that can be expected in birds of such similar plumage as larks.

Corvus culminatus, Sykes and C. intermedius, Adams.

These two crows, though very similar in general appearance, are nevertheless quite distinct. As a rule the latter has a decidedly (*by fully an inch*) longer tail and is a bird of duller plumage. The voice of the hill bird, too, is notably different, being a much deeper toned and more hollow sounded croak. This great difference in the note strikes most observers on first going to the hills. For a time, I was inclined to believe with Mr. Hume in the identity of the two species, but having examined a good number of each and having paid great attention to the voices and manners, I am entirely convinced of their specific distinctness.

Scolopax rusticola.

It was a mistake to include this bird among those that breed in the Cashmere Valley (J. A. S. B., 1872, p. 86). It breeds among the pines on the mountain sides, high up near the snows.